

Title (en)

ELECTRONIC APPARATUS AND OPERATION METHOD OF THE ELECTRONIC APPARATUS

Title (de)

ELEKTRONISCHE VORRICHTUNG UND BETRIEBSVERFAHREN DER ELEKTRONISCHEN VORRICHTUNG

Title (fr)

APPAREIL ÉLECTRONIQUE ET PROCÉDÉ DE FONCTIONNEMENT DE L'APPAREIL ÉLECTRONIQUE

Publication

EP 3966775 A4 20220622 (EN)

Application

EP 20864481 A 20200827

Priority

- KR 20190115472 A 20190919
- KR 2020011493 W 20200827

Abstract (en)

[origin: US2021088245A1] An operation method for reducing energy consumption and an electronic apparatus thereof are provided. The operation method includes obtaining, by the electronic apparatus, weather forecast information, inputting, by the electronic apparatus, the weather forecast information to an artificial intelligence model for predicting an amount of power to be consumed by a first air conditioner, and displaying, by the electronic apparatus, the predicted power consumption amount of the first air conditioner output from the artificial intelligence model, wherein the artificial intelligence model is trained to obtain correlation information between a weather condition and a power consumption amount of an air conditioner, based on a weather history and operations of a plurality of air conditioners related to the weather history, and predict the amount of power to be consumed by the first air conditioner based on the correlation information and the weather forecast information.

IPC 8 full level

G06Q 50/06 (2012.01); **F24F 11/52** (2018.01); **F24F 11/62** (2018.01); **F24F 11/63** (2018.01); **G01W 1/10** (2006.01); **G06N 3/08** (2006.01); **G06N 20/00** (2019.01)

CPC (source: EP KR US)

F24F 11/46 (2018.01 - EP US); **F24F 11/52** (2018.01 - EP KR US); **F24F 11/62** (2018.01 - EP); **F24F 11/63** (2018.01 - KR US); **F24F 11/65** (2018.01 - EP); **G01W 1/10** (2013.01 - KR); **G06N 3/044** (2023.01 - EP); **G06N 3/08** (2013.01 - EP); **G06N 20/00** (2019.01 - KR); **G06Q 10/04** (2013.01 - KR); **G06Q 50/06** (2013.01 - KR); **G06Q 50/10** (2013.01 - KR); **F24F 2110/12** (2018.01 - US); **F24F 2110/22** (2018.01 - US); **F24F 2110/32** (2018.01 - US); **F24F 2110/52** (2018.01 - US); **F24F 2110/74** (2018.01 - US); **F24F 2130/10** (2018.01 - EP US); **G06N 20/20** (2019.01 - EP); **Y02B 30/70** (2013.01 - KR); **Y04S 10/50** (2013.01 - KR); **Y04S 20/244** (2013.01 - KR); **Y04S 50/16** (2018.05 - KR)

Citation (search report)

- [X] US 2018195752 A1 20180712 - SASAKI TAIJI [JP], et al
- [X] US 2009187445 A1 20090723 - BARCLAY KENNETH B [US], et al
- [A] KR 20190096878 A 20190820 - LG ELECTRONICS INC [KR]
- [A] WO 2017062896 A1 20170413 - JOHNSON CONTROLS TECH CO [US]
- [A] KR 20160150156 A 20161229 - NRP SYSTEM CO LTD [KR]
- [A] US 2019271483 A1 20190905 - JOO YOUNGJU [KR], et al
- [A] US 2017206615 A1 20170720 - SLOOP CHRISTOPHER DALE [US], et al
- See also references of WO 2021054641A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 11536477 B2 20221227; **US 2021088245 A1 20210325**; EP 3966775 A1 20220316; EP 3966775 A4 20220622; KR 20210033769 A 20210329; US 2023087048 A1 20230323; WO 2021054641 A1 20210325

DOCDB simple family (application)

US 202017004445 A 20200827; EP 20864481 A 20200827; KR 20190115472 A 20190919; KR 2020011493 W 20200827; US 202218071017 A 20221129